

Navigating the Ethical Landscape: unveiling the transformative impact of Digital Technologies on Occupational Stress Assessment

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The advent of digital technologies has ushered in a paradigm shift in the field of stress assessment within occupational settings, leveraging advanced methodologies such as neurometrics and biomarkers. This transformative trend reflects a departure from conventional approaches to organizational assessment, providing a comprehensive understanding of the physiological and psychological dimensions of workplace stress. This pilot study aims to examine the ethical implications associated with this emerging practice. A group of 26 young professionals underwent digitized assessment in the form of video interviews. Alongside psychometric scales, sensitive data, including neurometric data through electroencephalography, autonomous biomarkers, and behavioral indicators, were collected to evaluate participants' stress responses in simulated work situations, as well as the cognitive load and associated emotional states. The results indicate significant correlations between neural, autonomic, and behavioral responses, prompting important considerations regarding the ethical application of such technologies in digitized environments and the subsequent sharing of this data with third parties or within databases. They provide valuable insights for the development of assessment tools that respect individual rights and endorse practices such as data anonymization and disclosure criteria shared in informed consent. Ethical sharing focuses on the need to ensure that results are accurately interpreted, avoiding misleading interpretations or potential abuses. Hence, challenges related to data security emerge, aiming to prevent unauthorized access and ensure the protection of personal information. In conclusion, robust ethical guidelines and clear regulations are indispensable to guide the responsible sharing of neurometric and biomarker results in work settings and with the scientific community, mitigating potential risks.

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